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Navy IPv6 Transition

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Communications and Networking Session

Sponsored by
SPAWARSYSCOM
FORCEnet Chief Engineer

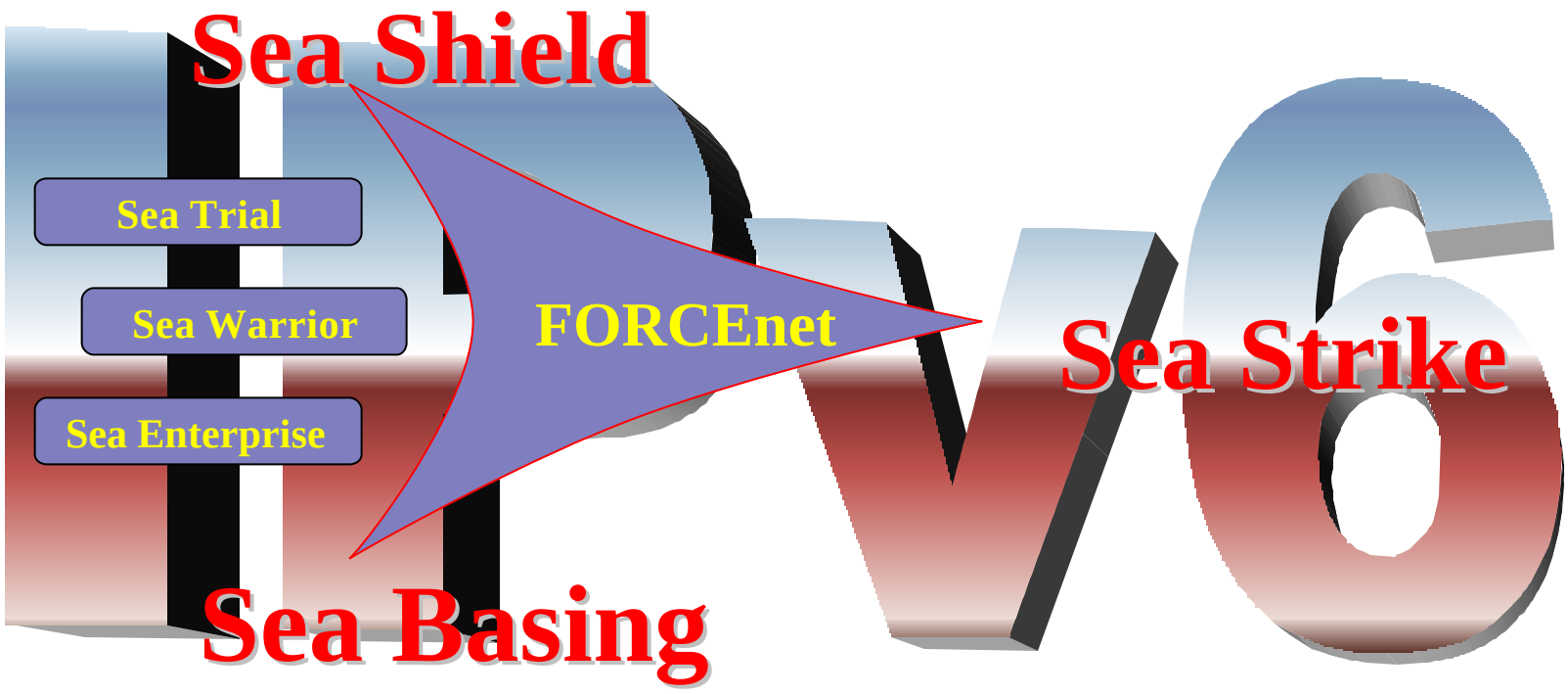
Agenda

- FORCEnet and IPv6
- Navy IPv6 Transition
- Industry Involvement
- Innovation

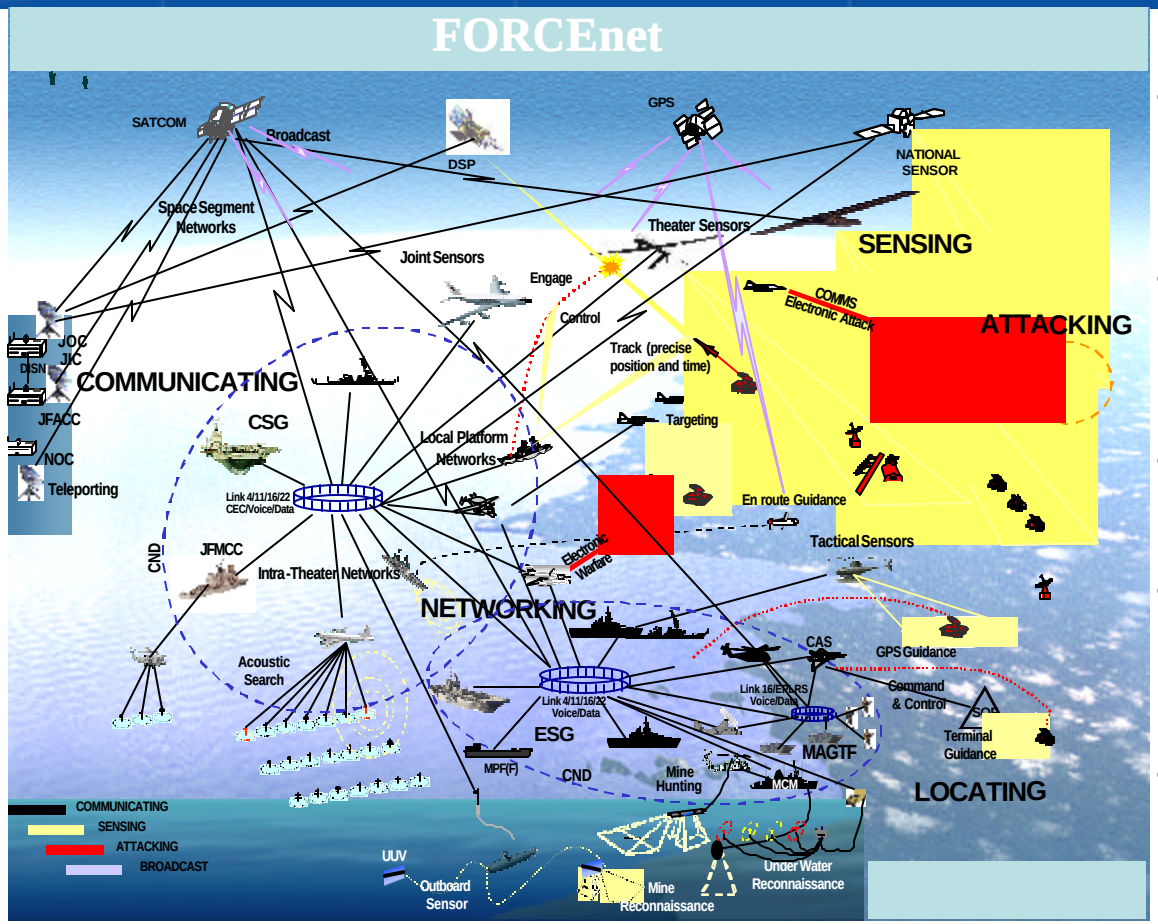
IPv6 and FORCEnet

- Our enemies are dedicated to finding new and effective methods of attacking us. They will not stand still. To outpace our adversaries, we must implement a continual process of rapid concept and technology development that will deliver enhanced capabilities to our Sailors as swiftly as possible.

Sea Power 21 Series By Admiral Vern Clark, U.S.Navy



Warfighting in the 21st Century



- **Exploit Every Source – Leverage What We Have**
- **Provide Shared Situation Awareness/ Understanding**
- **Support Dominant Speed of Command**
- **Permit Precise, Synchronized Execution**
- **Allow Agility and Flexibility**

IP Based Transformational Communications

IPv6 Enabling FORCEnet

Winning the Fight…And Bridging to the Future

FORCEnet,…"and created a plan to transition our communications to a worldwide Internet Protocol using the advanced ***IPv6 standard***."

CNO Guidance for 2005 By Admiral Vern Clark, U.S. Navy

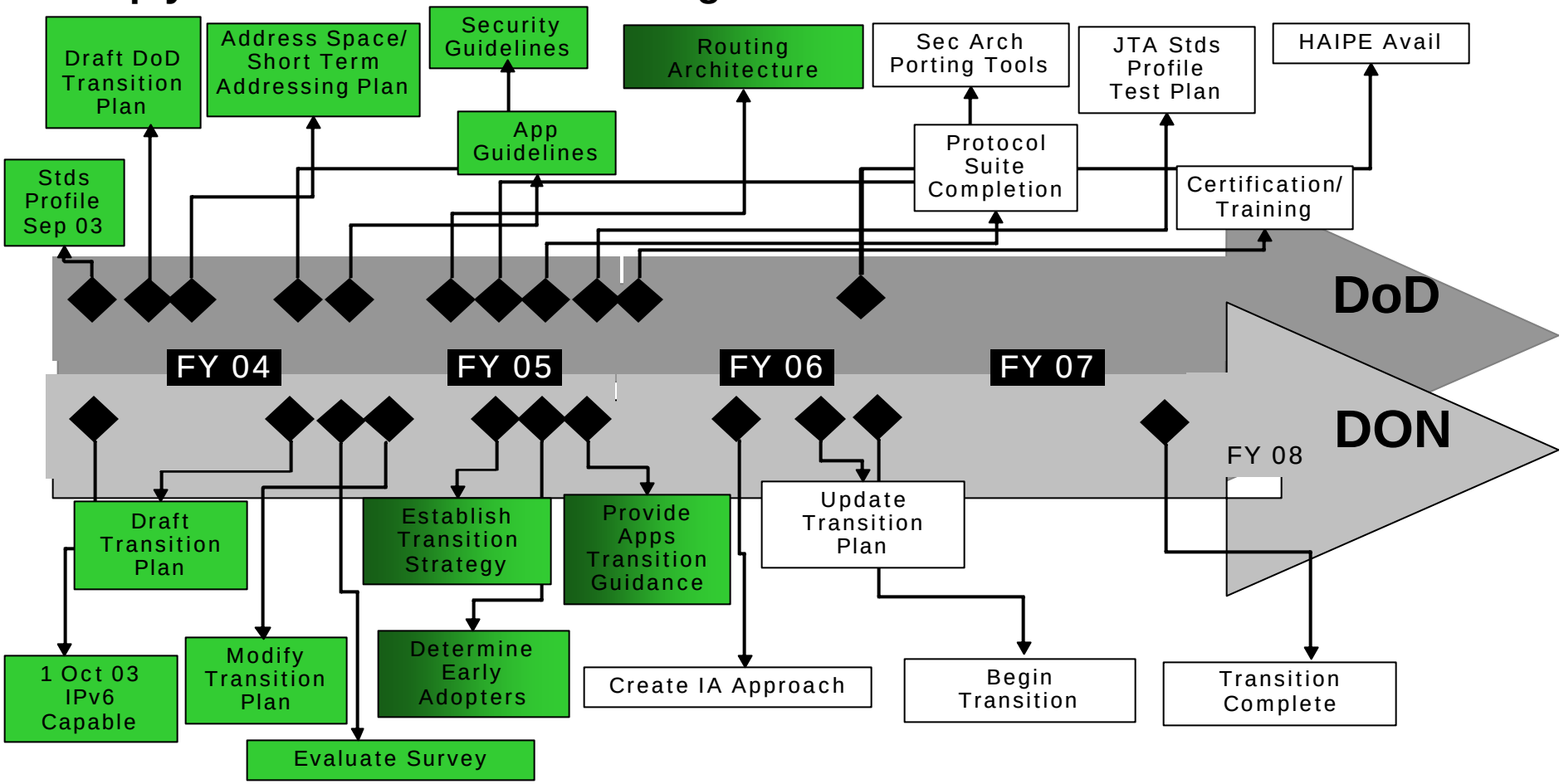
NAVY IPv6 PROJECT OFFICE

Navy IPv6 To Date

- ASD set DoD GOAL for transition to IPv6 by FY08
- DoD policy states all Navy IT developed, acquired, or procured be IPv6 capable
- Navy IO (OPNAV N6F) and OPNAV N61 are designated leads for the development of the IPv6 transition plan
- SPAWAR designated the Navy technical lead
  - Navy IPv6 Transition Plan/Navy IPv6 Test Plan/Navy IPv6 Survey
- Navy IPv6 Transition Team Working Groups (Virtual SYSCOM)
- Joint Service Collaboration

Navy Transition Plan Overview & Objectives

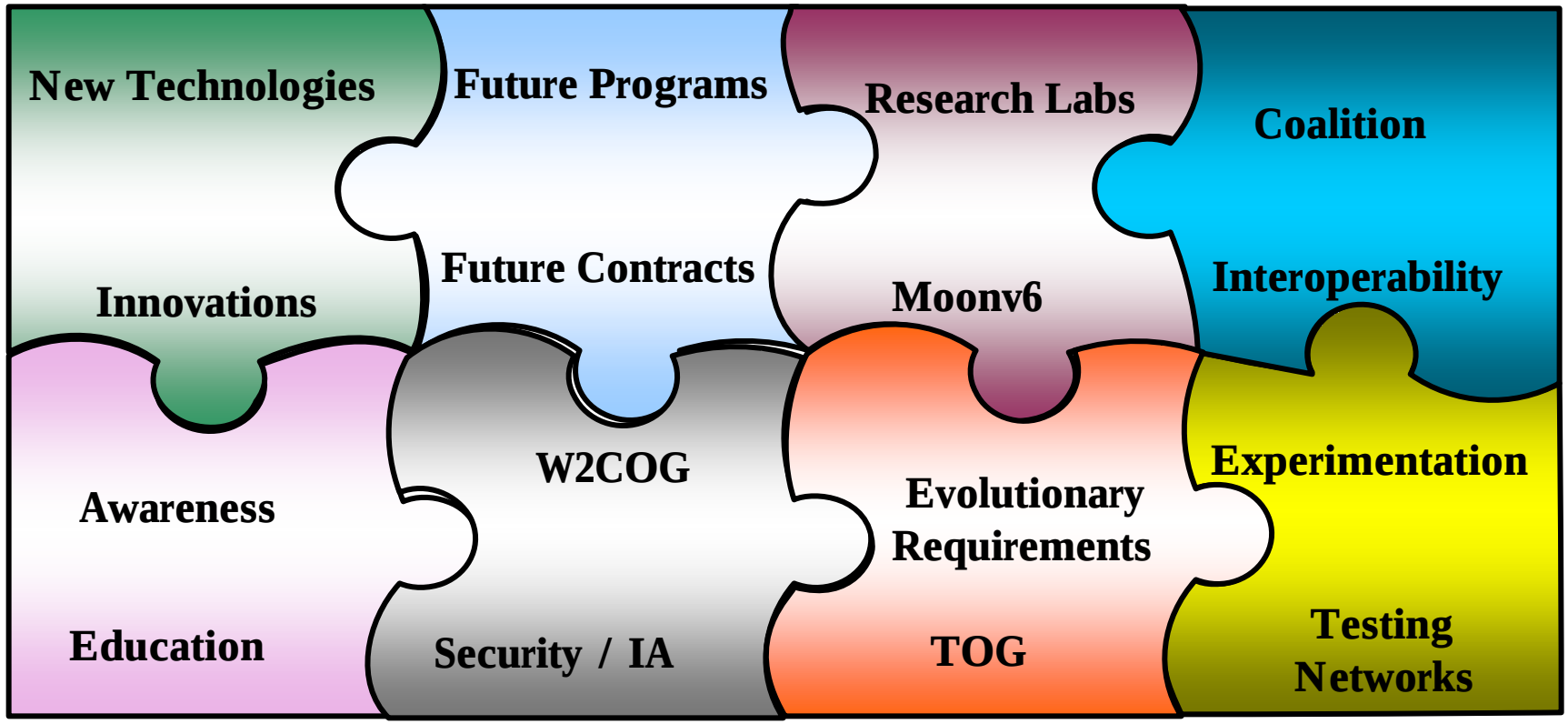
- Achieve Enterprise-wide deployment of IPv6
- Meet operational requirements, IA and cost while maintaining interoperability
- Comply with DoD stated schedule goals



Navy IPv6 Transition Success Measures

- Critical Navy system interfaces identified and tracked through transition
  - Navy Programs, dependencies, and development efforts
- Navy-wide consensus on, and participation in key IPv6 milestones to achieve compliance IAW DoD Directives
- Transition End State Goals
  - Full IPv6 transition
  - Minimize requirements for IPv4
- Leverage new technologies for the warfighter
  - MANET

Strategic Partnerships Between Government, Allies and Industry



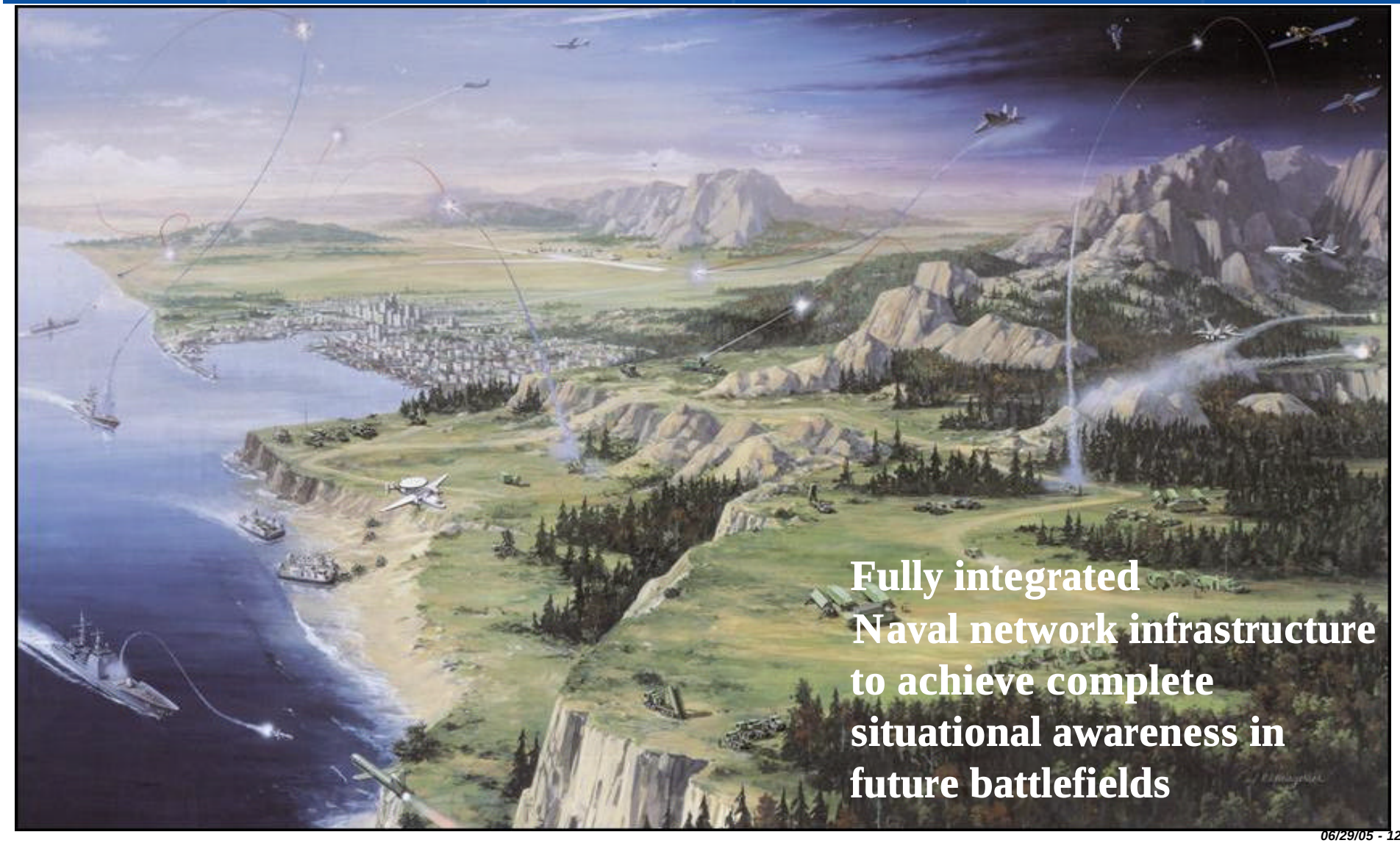
Innovation Efforts

- Engage acquisition and laboratory activities in discussions to further innovation within IPv6 designed to support future Navy networks
  - CNO N7 directed activity
  - Coordinated across services through liaison with service TO's
- Champion demonstrations and pilots
  - Work to acquire funding for originating activity
  - Ensure coordination across services to avoid duplicity
- Provide a supporting role for pilots and early adopter programs
  - Assist with roadmap and interoperability issues across services and within the DON CIO and OPNAV domains
- Collaborate with industry

IPv6 Future Navy

- Remote monitoring capability and/or control
- Available on demand, real-time, from anywhere on the ship…
- Wireless video
- Wireless communications
- Self forming networks
- Secure VoIP
- MANET

MANET and the Warfighter



Questions

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